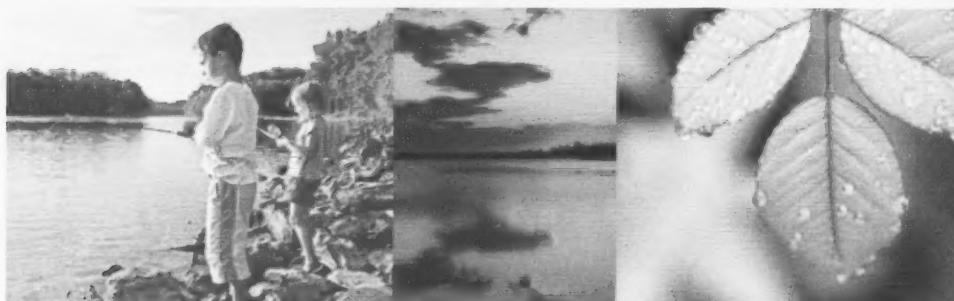


ALBERTA WATER COUNCIL



DECEMBER 2008

Recommendations for a Watershed Management Planning Framework for Alberta



About the Alberta Water Council

The Alberta Water Council is a multi-stakeholder partnership with Members from governments, industry and non-government organizations. All Members have a vested interest in water. The Alberta Water Council is one of three types of partnerships established under the *Water for Life* strategy; the others are Watershed Planning and Advisory Councils, and Watershed Stewardship Groups.

The Alberta Water Council monitors implementation of the *Water for Life* strategy and champions the achievement of the strategy's goals. It also advises the Alberta Government, stakeholders and the public on effective water management practices and solutions to water issues, as well as on priorities for water research. Where there is consensus, the Council may advise on government policy and legislation. However, the Government of Alberta remains accountable for the implementation of the *Water for Life* strategy, and continues to administer water and watershed management activities throughout the province.

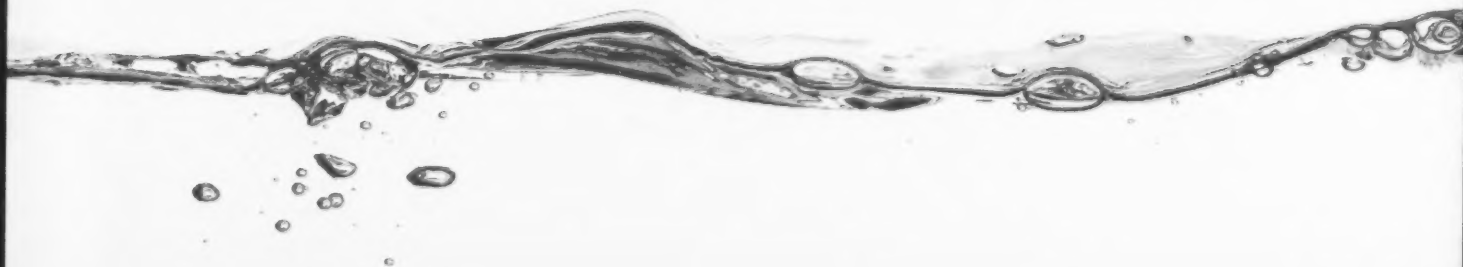
Alberta Water Council
14th Floor, Petroleum Plaza South Tower
9915 – 108 Street
Edmonton, AB T5K 2G8

Tel: 780-644-7380

Fax: 780-644-7382

Email: info@AWChome.ca

Web: www.AWChome.ca

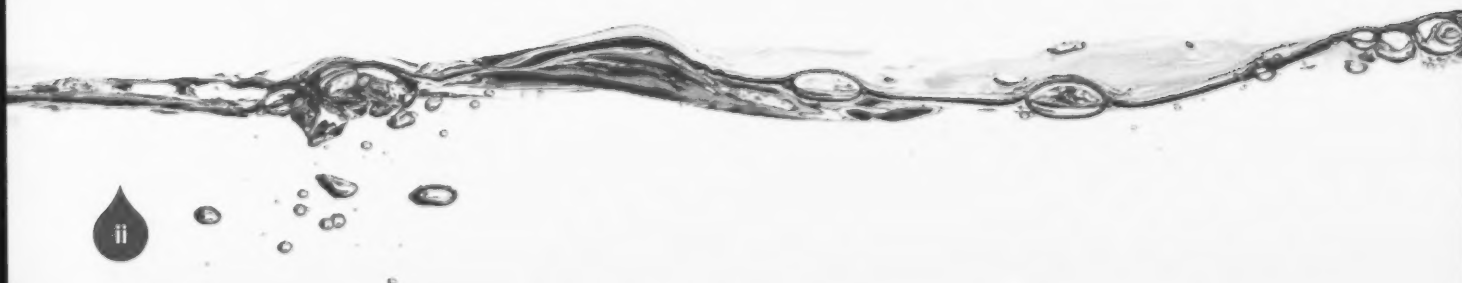


Contents

Executive Summary and Recommendations	1
1.0 Introduction	4
1.1 <i>Water for Life</i> and the Place-based Approach to Watershed Management	4
1.2 Legislative Support for Watershed Management	5
2.0 Improving Watershed Management under <i>Water for Life</i> ...	7
2.1 Key steps in watershed management	7
2.2 Collaborating for Watershed Management	9
2.2.1 Who is Involved in Watershed Management?	9
2.2.2 How will Participants Work Together?	10
2.2.3 Clarifying the Roles, Responsibilities and Relationships of Partnerships for Watershed Management	12
2.3 Assessing the State of the Watershed	15
2.4 Developing a Watershed Management Plan	16
2.4.1 Scope of a Watershed Management Plan	17
2.4.2 Components of a Watershed Management Plan	18
2.4.3 Steps for Preparing a Watershed Management Plan	20
2.4.4 Content of a watershed management plan	22
2.4.5 Getting Endorsement of a Watershed Management Plan	25
2.5 Do: Implementing a Watershed Management Plan	26
2.6 Check: Monitoring and Reporting	27
2.7 React: Re-evaluate the Plan	28



3.0 Other Issues for Watershed Management	29
3.1 The Authority of a Watershed Management Plan	29
3.2 The Relationship of a Watershed Management Plan to Other Planning Initiatives	30
3.3 Resource Needs to Support Watershed Management	32
4.0 Conclusion.....	34
Appendix A — Glossary.....	35
Appendix B — Project Team Methodology.....	39
Appendix C — Project Team Members	40
Appendix D — Terms of Reference	41



Executive Summary and Recommendations

During the development of *Water for Life: Alberta's Strategy for Sustainability* (2003), Albertans said they wanted to be more involved in watershed management. The Government of Alberta agreed and provided clear direction in *Water for Life* that watershed management is a shared responsibility to be carried out through partnerships with Albertans.

The existing policy and legislative framework created by the *Water Act* (2000) and the *Framework for Water Management Planning* (2001) provide the foundation for watershed planning envisioned under *Water for Life*. However, *Water for Life* also strengthens this framework by putting a greater emphasis on managing water resources through a watershed approach using *shared governance* to achieve its outcomes.

Therefore, the purpose of this document is to provide recommendations towards the development of a framework that will integrate shared governance and a watershed approach into the existing policy and legislation to improve watershed management in Alberta. This document identifies key components of watershed management planning and provides guidance for partners working together under a shared governance structure to plan and implement watershed management plans to achieve *Water for Life* goals. Finally, the document discusses and makes recommendations regarding the authority and resourcing of a plan and its integration with other land and resource management planning initiatives.



Throughout the document, a number of recommendations are made. These are listed below:

Recommendation 1: All watershed management planning activities should contribute to the achievement of *Water for Life* goals and at a minimum, should follow the *Framework for Water Management Planning* created under the *Water Act*. Additionally, these activities should embrace a watershed and shared governance approach. All watershed management planning activities must be consistent with *Water for Life* and fit within the provincial policy and legislative context.

Recommendation 2: Watershed Planning and Advisory Councils and Watershed Stewardship Groups undertaking watershed management planning should include all sectors that regulate, use, affect or are affected by the water resource as well as all authorities required for implementation of the plan.

Recommendation 3: Watershed planning initiatives launched by any partnership within a watershed must be aligned with the plans of the designated Watershed Planning & Advisory Council, where one exists. Where a Watershed Planning and Advisory Council does not exist, local water or watershed management planning outcomes should be complementary and directed towards supporting *Water for Life* outcomes.

Recommendation 4: All Watershed Planning and Advisory Councils and Watershed Stewardship Groups undertaking planning initiatives should be listed, with their watershed link and contact information, in a central directory, such as the *Water for Life* website.

Recommendation 5: To set the scope and emphasis for watershed management plans, planning groups should produce a State of the Watershed Report with input from stakeholders and the public before planning is initiated. Nevertheless, planning to address issues already identified by watershed stakeholders does not have to await completion of that comprehensive report.

Recommendation 6: Alberta Environment should facilitate a process to identify core indicators of watershed health to assist watershed assessment and planning. The Alberta public, Watershed Planning and Advisory Councils, Watershed Stewardship Groups and other interested stakeholders should have input into this process.

Recommendation 7: Watershed management plans should be developed within the overall context of the whole watershed and broaden the focus from the main river to the entire watershed (tributaries, lakes, wetlands, groundwater, sub-watersheds) including water use and land use as they affect water.

Recommendation 8: The Alberta Water Council should review the implementation of Alberta's watershed management plans as part of the *Water for Life* implementation review process, and re-visit the question of needed legislation in the future.

Recommendation 9: Regional Advisory Committees established under the *Land Use Framework* should seek input from Watershed Planning and Advisory Councils and Watershed Stewardship Groups about their watershed management information, objectives and expertise. Where water or watershed management plans exist, these plans must be considered by the Regional Advisory Committees in their regional planning process.

Recommendation 10: The Government of Alberta, working with its *Water for Life* partnerships, should facilitate the development of a *Water for Life* Partnership Funding Model that elicits support from all relevant sectors, understanding that core operating funding will continue to be provided by the Government of Alberta.

Recommendation 11: The Government of Alberta should pursue the development of an information network to support watershed management.

Recommendation 12: In light of the recommendations within this document, the Government of Alberta should review the *Framework for Water Management Planning* and update it by March 31, 2009 to better reflect a watershed and shared governance approach.

With the production of a revised *Framework for Water Management Planning* that better reflects a watershed and shared governance approach, groups engaged in watershed planning will have a much clearer understanding of how they should approach this important task, who to engage and what is expected. Among the many strengths of the proposed approach is that a watershed management plan will be a living document, built by the partners who will implement the plan and the stakeholders who will be affected by the plan. Plans will be adaptive and flexible to address emerging challenges and new information. They will therefore remain current and relevant to all resource and land-use managers in the watershed.



1.0 Introduction

1.1 *Water for Life* and the Place-based Approach to Watershed Management

Water is essential for all life. Its wise management is critical to the health and well-being of current and future generations of Albertans. To improve our management of this resource, *Water for Life: Alberta's Strategy for Sustainability*, (available online at www.waterforlife.gov.ab.ca) provides three goals:

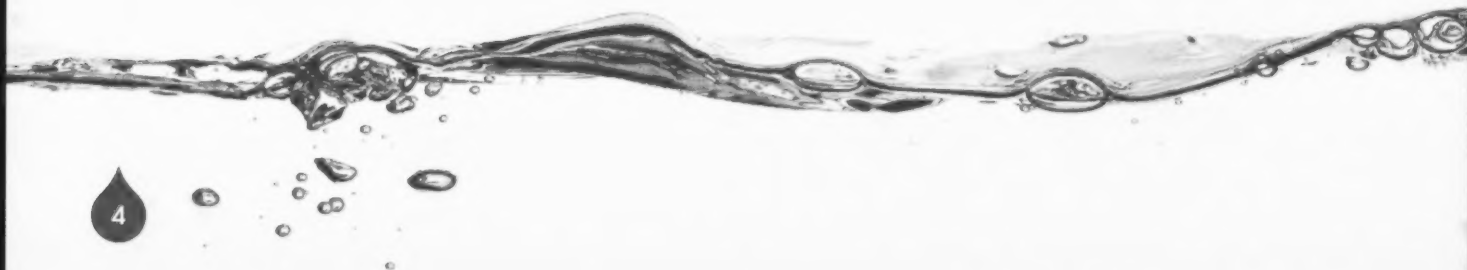
- Safe, secure drinking water
- Healthy aquatic ecosystems
- Reliable, quality water supplies for a sustainable economy

To achieve these goals, the strategy emphasizes action in three key areas:

- Knowledge and research
- Partnerships
- Water conservation

During consultation for *Water for Life*, Alberta Environment heard that water issues are different in different parts of the province. They also heard that Albertans want to be more involved in water management. In response, the *Water for Life* strategy suggests a place-based approach. This approach asserts that the people in the place are the best ones to identify and find solutions to the issues. For water, the geographically-defined place is the watershed. A watershed is an area of land that catches precipitation and drains it to a common point such as a wetland, lake, river, stream, or groundwater aquifer.

Applying a place-based approach also means looking holistically at the place, including both its physical features and the issues affecting them. Physical features of a watershed may include large main stem rivers, as well as smaller tributaries, streams, creeks, lakes, wetlands, sub-watersheds, groundwater and the linkages between them (connectivity). Issues can include point and non-point source pollution, source water protection, storm water and wastewater management, subsurface water supplies and a variety of land-use activities that impact the water resource.



How the people in an area collaboratively work together to manage their water issues can be called *shared governance*. *Governance* refers to a formal process under which an entity makes decisions, determines whom they will involve in the process, and how they will render accountability. *Shared governance*, as defined in the Alberta Water Council's report *Strengthening Partnerships: a Shared Governance Framework for Water for Life Collaborative Partnerships*, is a governance structure where both government and other stakeholders share responsibility for the development and delivery of policy, planning, and programs or services, but where government retains legislative accountability. It is a collaborative, goal-setting and problem-solving process built on trust and communication, where both government and stakeholders share responsibility for setting and achieving shared outcomes.

Hence, *Water for Life* and the partnerships that have arisen from it have broadened past water management practices to incorporate a more holistic, place-based approach. This approach incorporates shared governance and a watershed perspective to improve the management of the water resource and to better integrate its management with other sustainable resource and environmental management. These changes are a logical evolution and will continue to improve over time as we learn from our experiences.

1.2 Legislative Support for Watershed Management

Even before there was *Water for Life*, there were a number of tools to manage water. First and foremost, the *Water Act* identifies water as "vested in the crown." The purpose of the *Water Act* is to "support and promote the conservation and management of water, including the wise allocation and use of water, while recognizing..." (1) the need to manage this resource sustainably to meet the triple bottom line (social, environmental and economic outcomes); (2) the need to take an integrated and comprehensive approach; and (3) the shared responsibility of all Albertans to conserve, use wisely and provide advice on water management planning and decision-making.

Water management planning has been underway in Alberta for many years and was given a legislative basis under the *Water Act*. The Act also calls for the development of a provincial planning framework to layout how planning will occur, how it will cooperate and integrate with other agencies and planning initiatives, and the scope and physical boundaries



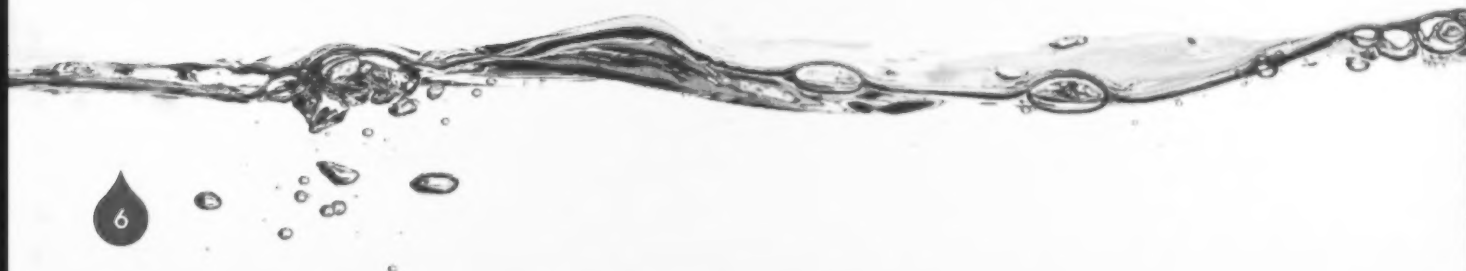
of a plan. The *Framework for Water Management Planning* was published in 2001. It is available from Alberta Environment's Information Centre or via the internet at <http://environment.gov.ab.ca/info/library/6367.pdf>. This policy document identifies the scope of a Water Management Plan as follows:

"The scope of planning relates to the geographic limits of the planning area as well as the breadth of issues and information considered. Water management planning is most effective when it considers all areas likely to affect or be affected by the plan. Therefore, geographic limits for water management planning areas will normally be watershed boundaries. ...planning can address a broad range of issues...such as water supply, water quality, fish habitat needs, aesthetics and recreational use."

From this description, it is clear that the *Water Act*, the *Framework for Water Management Planning*, and *Water for Life* documents are well aligned. Watershed planning activities can be undertaken under the existing policy and legislative framework. However, the existing *Framework for Water Management Planning* does not fully reflect the collaborative watershed approach established under *Water for Life*. Today, *Water for Life* partnerships, provincial and municipal government planners and other stakeholders have asked how these new terms and approaches relate to the existing framework and watershed management as a whole.

Therefore, this document seeks to explain the relationship and provide a clearer picture of watershed management as it has evolved under the *Water for Life* strategy. Specifically, this document will provide clarity on (1) how the existing *Framework for Water Management Planning* can be improved through the application of a collaborative, shared-governance approach; (2) how it can be broadened to put more emphasis on the whole watershed (not just the main-stem river); and (3) how planning in an adaptive management process can be successfully implemented. It does not however, replace the original *Framework for Water Management Planning*.

Recommendation 1: All watershed management planning activities should contribute to the achievement of *Water for Life* goals and at a minimum, should follow the *Framework for Water Management Planning* created under the *Water Act*. Additionally, these activities should embrace a watershed and shared governance approach. All watershed management planning activities must be consistent with *Water for Life* and fit within the provincial policy and legislative context.



2.0 Improving Watershed Management under *Water for Life*

2.1 Key steps in watershed management

There are many facets to watershed management, which for the purposes of this document can be summarized as six key activities:

- **Collaborate:** Assemble the full range of affected stakeholders in the defined geographical area and form a partnership governed by inclusiveness, transparency, consensus decision-making and shared learning.
- **Assess:** Assess the current state of the watershed in a report to share with members and others. This snapshot of how things are today helps to identify the key issues that need to be addressed in a plan.
- **Plan:** Prepare a watershed management plan. This plan establishes desired outcomes and outlines the actions needed to achieve them.
- **Do:** Implement the actions in the plan.
- **Check:** Monitor results and report to the partnership, public and others on the progress made towards achieving the outcomes identified in the plan.
- **React:** Revise the watershed management plan, actions or outcomes to accommodate new circumstances or information.

The activities above form the foundation of watershed management. Collectively, they also form the basis of an iterative, adaptive management process. Adaptive management supports continuous improvement and ensures that watershed management activities remain relevant.

Adaptive management allows Watershed Planning and Advisory Councils (WPACs) and supporting Watershed Stewardship Groups (WSGs) to:

- Address known issues immediately while collecting data to address lesser known issues; and
- Focus on priority elements of a watershed, such as sections of the main river, specific lakes, wetlands, groundwater or sub-watersheds.



Adaptive management accommodates change as new and more accurate information becomes available. New information may become available through:

- Applied research, new technologies, improved best management practices, and reporting of performance relative to implementation of key actions and performance measures outlined with the watershed management plan; and
- On-going monitoring of the water resource, including water quality, quantity and aquatic ecosystem health data.

Finally, adaptive management enables a learning-by-doing, evolutionary or incremental change in response to a growing body of knowledge or in response to unexpected changes in the watershed caused, in part, by the actions taken to achieve outcomes.

Watershed management plans that incorporate adaptive management require a long-term commitment of resources to ensure success. Financial, technical, and other human resource requirements need to be defined at the outset, along with the specific responsibilities of each party.

Figure 1: An adaptive management approach to watershed planning.



Outcome-based planning and adaptive management should enable partners to align themselves in support of outcomes and actions to achieve the three key *Water for Life* goals. Local solutions, focused in a geographic region and applied by those most immediately affected by water issues, will lead to direct and effective watershed management. These efforts should also be coordinated across Alberta, such that intersecting interests are accommodated as far as is reasonable and best practices shared at local, regional and provincial scales.

While there are many resources and examples of these steps elsewhere (for example, see the *Handbook for Developing Watershed Plans to Restore and Protect Our Waters* at the US Environmental Protection Agency website at http://www.epa.gov/owow/nps/watershed_handbook/), they will be discussed further below in the Alberta *Water for Life* context.

2.2 Collaborating for Watershed Management

2.2.1 Who is Involved in Watershed Management?

To be successful, Alberta's *Water for Life* strategy relies upon the engagement and collaboration of federal, provincial, municipal, First Nation, Métis Settlement and other local governments; industry and agriculture; environmental non-government organizations, academic and other organizations; other stakeholders; and the general public. All of these stakeholders affect and have a shared interest in the long-term, sustainable management of Alberta's water resources. Partnerships are the vehicle for bringing stakeholders together to collaborate. *Water for Life* identifies three types of partnerships to lead collaborative watershed management in Alberta: (1) the Alberta Water Council, (2) Watershed Planning and Advisory Councils, and (3) Watershed Stewardship Groups.

The Alberta Water Council is a multi-stakeholder partnership with members from governments, industry, and non-government organizations. The Council works at a provincial scale to monitor and steward the implementation of the Alberta's *Water for Life* strategy.

Watershed Planning and Advisory Councils (WPACs) are regional organizations with the mandate to engage governments, stakeholders, other partnerships, and the public in watershed assessment and planning. WPACs are formed on the basis of Alberta's major river basins, as defined under the *Water Act*. However, several of the larger major river basins have been further split into smaller units for management purposes. For example, the South Saskatchewan River basin is split into four planning units and four partnerships – the Red Deer River Watershed Alliance, the Bow River Basin Council, the Oldman Watershed Council and the South East Alberta Watershed Alliance. The decision to split major basins into more manageable planning units is the decision of the Government of Alberta with input from stakeholders in that region.



Watershed Stewardship Groups (WSGs) include a wide range of organizations with diverse mandates. Made up of local governments, stakeholders, interested individuals and residents, these groups undertake actions to raise awareness or physically improve their local watershed or waterbody. As part of these actions, WSGs may undertake local watershed assessment and planning activities.

As unique, multi-stakeholder organizations, WPACs and WSGs often have a rich and varied membership. They may also have tailored their own governance structure to meet their own needs. As a principle, however, when they undertake watershed management planning, WPACs and WSGs must ensure they engage all the sectors in the planning area who use, have an impact on, or regulate the water resource, or who are affected by water use and its related impacts. It is essential that these sectors collaborate to share expertise and information; reach consensus on desired outcomes; and define and accept responsibility for key actions within the watershed management plan. The Alberta Water Council's sector model, outlined in *Strengthening Partnerships: a Shared Governance Framework for Water for Life Collaborative Partnerships*, provides an organized approach to representation from key sectors. In using this model, members are expected to develop a communications process to share project information within the sector they represent.

Recommendation 2: Watershed Planning and Advisory Councils and Watershed Stewardship Groups undertaking watershed management planning should include all sectors that regulate, use, affect or are affected by the water resource as well as all authorities required for implementation of the plan.

2.2.2 How will Participants Work Together?

All *Water for Life* partnerships must understand and be committed to shared governance and the use of consensus in their decision-making. *Strengthening Partnerships: a Shared Governance Framework for Water for Life Collaborative Partnerships* further describes the key principles of what it means to be a partnership under *Water for Life* and these principles are presented below:

- Partnerships must ensure they have mechanisms in place so that communication is open and transparent, allowing a good flow of input to their initiatives and good communication out to affected sectors.
- Partnerships will work to achieve *Water for Life* goals through an outcome-based planning approach to initiatives. Recommended outcomes should lead to actions, actions should have measurable results, and reporting on performance should lead to sustainable watershed management.

- Partnerships consist of a number of partners, each of whom represents a particular sector. Partners must commit to promoting the decisions of the project team or partnership and communicating these with their sectors.
- Where decisions identify actions to be taken by members of specific sectors, partners must commit to reporting on the implementation of those actions to the project team or partnership.
- All partners – as individuals and on behalf of organizations – must share their expertise, information and resources.
- Water policy development, watershed management planning, and related programs and services must be coordinated with municipal, provincial and federal water and land-use planning and decision-making processes. They must be consistent with the *Water Act*, *Public Health Act*, *Environmental Protection and Enhancement Act*, *Agricultural Operation Practices Act*, *Public Lands Act*, *Forests Act*, federal *Fisheries Act* and *Navigable Waters Protection Act* and other relevant policies and legislation.
- The Government of Alberta will uphold its legislated responsibility, accountability and legal authority for water and land use management decisions.

In addition to the above, WPACs and WSGs should have a thorough understanding of consensus before undertaking a watershed assessment or planning initiative. Consensus is generally considered reached when there is unanimous agreement and each stakeholder can live with the outcome. It is very important that every partnership have agreement on what consensus means to them, how they will know when they have it, and how they will resolve disputes if they arise. For more information, please see *Strengthening Partnerships*. Several resources on consensus are also available online. In the Alberta context, the Clean Air Strategic Alliance has produced a booklet, *Beyond Consultation - Making Consensus Decisions* that can be found online at http://www.casahome.org/?page_id=196. The Alberta Water Council can also supply its 2005 document *Defining Consensus* upon request.



2.2.3 Clarifying the Roles, Responsibilities and Relationships of Partnerships for Watershed Management

The roles, responsibilities and relationships between the *Water for Life* partnerships are described in Alberta Environment's 2005 report *Enabling Partnerships* and in the Alberta Water Council's recent *Strengthening Partnerships* report. There are, however, a few points still requiring clarification about these partnerships.

To begin with, watershed assessment and planning is the core business of Watershed Planning and Advisory Councils. However, to be successful at these tasks, WPACs first have to be as knowledgeable as possible about their watershed. This means WPACs must have access to all existing and new information pertaining to the health and function of their watershed. Sometimes, WPACs will commission the collection of data or information. At other times, other agencies will collect or commission information that should be made readily available to the WPACs. The analysis, interpretation and sharing of information is a challenging task for WPACs and their supporting partners, but is necessary to inform stakeholders and ultimately, to produce State of the Watershed Reports and watershed management plans. The Government of Alberta and other agencies supporting WPAC work should not underestimate the magnitude of this information-gathering and synthesis role.

WPACs also have a role in delivering public education and awareness, and in consulting with the public on WPAC outputs. An informed and engaged public is a key to successful watershed management. As well, the outcomes for a watershed often reflect the values and needs of the people in it. Hence, WPACs must connect and be in good standing with both stakeholders and the public in order to collect, understand and incorporate these values. Again, this role should not be underestimated.

Throughout the creation of this document, there have been numerous discussions on the role of Watershed Stewardship Groups. As mentioned above, these groups undertake actions to improve their local watershed or waterbody. In some instances, these actions may include local watershed assessment and planning activities. The *Framework for Water Management Planning* describes how large basin and smaller planning initiatives can nest together:

"Watershed shapes and sizes vary. A watershed may feed to a lake, wetland, creek or river. The largest watershed is a major river basin. Each major river basin is made up of smaller watersheds that contribute to it. Water management planning in a sub-basin must consider implications to the major basin. Commitments or objectives resulting from a planning process in a sub-basin should not adversely affect other sub-basins or the major basin."

If planning initiatives are nested, their outcomes should be aligned with one another and the policy directions given in the *Water for Life* strategy. This alignment should be assured through an interactive process between the various planning bodies and should result in complementary outcomes that support the *Water for Life* strategy and integrated watershed management.

The timing of WPAC formation is an issue in Alberta. There are areas where WSGs are undertaking planning where no WPAC currently exists to which they can link. This issue will be resolved over the next few years as the last northern WPACs are established. In the meantime, such groups should be encouraged and supported to continue their work in meeting *Water for Life* outcomes and should be identified as stakeholders in the formation of these new northern WPACs. Whether or not a WPAC exists, WSGs should review their plans to ensure the outcomes and actions of their plan are consistent with *Water for Life* goals and do not adversely affect the outcomes of other sub-basins or major basin planning initiatives. Similarly, WPACs initiating planning must identify all existing plans and planning initiatives, including those of WSGs to assure outcome consistency in management of the broader watershed.

Recommendation 3: Watershed planning initiatives launched by any partnership within a watershed must be aligned with the plans of the designated Watershed Planning & Advisory Council, where one exists. Where a Watershed Planning and Advisory Council does not exist, local water or watershed management planning outcomes should be complementary and directed towards supporting *Water for Life* outcomes.

Overall, a key point to consider is the need for good communication between all watershed and related planning initiatives. Identifying the plans and planning exercises that relate to a specific watershed can be very challenging. A simple directory of the groups that are leading such processes would be very beneficial.

Recommendation 4: All Watershed Planning and Advisory Councils and Watershed Stewardship Groups undertaking planning initiatives should be listed, with their watershed link and contact information, in a central directory, such as the *Water for Life* website.

The Alberta Water Council does not have a direct role in watershed assessment and planning but contributes indirectly through the development of policies that can address issues across several watersheds. For example, the Council's work to develop a framework for sector-based water conservation, efficiency and productivity plans will improve water demand issues in several watersheds. Working through the WPAC representative on the Alberta Water Council, WPACs and WSGs may raise specific policy gaps identified through iterative watershed management activities. This will require a good flow of communication between the WPAC representatives on the Council and Alberta's WPACs and WSGs.



The Government of Alberta plays a role in watershed assessment and planning as a partner on WPACs, and in some cases, WSGs. In this partner role, the Government of Alberta, like other partners, is responsible for providing technical and financial resources to the best of its ability. To be an effective participant in a planning initiative, the provincial government will form a Cross-Ministry Support Team to enable multiple ministries to provide input to, and endorsement of, plans through their representative on the WPAC or WSG planning committee. This is an important link in assuring cross-ministry support for a watershed management plan and its implementation through their daily jurisdictional decisions.

Exclusive of its involvement in the *Water for Life* partnerships, the Government of Alberta will also continue to uphold its legislated responsibility, accountability and legal authority for water and land-use management decisions. It is the final authority on matters of water quality and quantity, approvals, allocations, Water Conservation Objectives, etc. At times, the Government of Alberta's assurance function will require the government to set a regulatory backstop, such as those recently seen in the *Athabasca River Water Management Framework* and the *Water Management Framework for the Industrial Heartland and Capital Region*. When this occurs, the Government of Alberta will endeavor to communicate and cooperate as much as possible with any existing *Water for Life* partnership in that area. Section 3.1 in this report provides additional discussion on the Government of Alberta's role as an endorsement planning partner and regulator in watershed management.

At this time, WPACs and WSGs are not expected to assume a regulatory or assurance function. This function, defined by legislation, currently remains within the purview of government. WPACs and WSGs are also not expected to assume water quantity and quality monitoring roles. However, this is not to say that WPACs and WSGs will not commission their own monitoring work to supplement existing work carried out by the provincial government and other agencies. As the most knowledgeable entity about the information needs of their watersheds, WPACs and WSGs can play an important coordination role between agencies so that monitoring resources are maximized and duplication is avoided.

2.3 Assessing the State of the Watershed

Watershed management plans describe the desired condition or end state of the watershed and the actions needed to reach that end state. Before a desired end state and course of action can be developed, an assessment of the current condition of the watershed is very helpful. This is often provided in a State of the Watershed Report.

A state of the watershed assessment determines the current or baseline condition of the watershed and how it has been changing over time. It contains technical information regarding the factors that define watershed health and function, such as lake levels and river flows, water quality, wetlands, land cover and riparian areas. It also describes the associated biodiversity and activities on the landscape that affect the aquatic environments throughout the watershed. In addition to assembling a wide range of technical information, State of the Watershed Reports include an interpretation and analysis of information to help identify and understand the key factors affecting the watershed.

State of the Watershed Reports set the scope for a watershed management plan and identify key issues that need to be addressed. Updates to the State of the Watershed Report are useful in tracking a changing watershed and informing the adaptive management process over the long term. State of the watershed reporting is also an important education tool, raising awareness and understanding of the condition of the watershed with stakeholders and the public. A 2008 *Handbook for State of the Watershed Reporting* published by Alberta Environment is available online at <http://environment.gov.ab.ca/info/library/8044.pdf> and provides more detailed information on this subject.

Recommendation 5: To set the scope and emphasis for watershed management plans, planning groups should produce a State of the Watershed Report with input from stakeholders and the public before planning is initiated. Nevertheless, planning to address issues already identified by watershed stakeholders does not have to await completion of that comprehensive report.

For assessing the state of the watershed, it is a common practice to identify key indicators of watershed health. These may be certain water quality parameters, such as nutrients, dissolved oxygen or certain toxic chemicals. Water flow or lake levels may also be used. The abundance of certain plant or wildlife species may also be good indicators. Other examples include the extent and condition of wetlands, riparian areas and upland cover, which are three elements that have a direct influence on watershed health and function. Measures of some of the pressures on aquatic ecosystems may also be included, such as measures of urban growth and industrial practices, volumes of water withdrawn for human use or new sources of wastewater discharging into a watercourse.



Some of these indicators of watershed health will be the same throughout the province. It would be very beneficial to groups conducting watershed assessments if these core indicators were described and sources of information identified. They should not have to re-invent the process for every watershed assessment. Nevertheless, other indicators relevant to the specific conditions and pressures in a particular watershed will still need to be identified.

Recommendation 6: Alberta Environment should facilitate a process to identify core indicators of watershed health to assist watershed assessment and planning. The Alberta public, Watershed Planning and Advisory Councils, Watershed Stewardship Groups and other interested stakeholders should have input into this process.

2.4 Developing a Watershed Management Plan

Once the current state of a watershed and the issues it faces are known, the partnership can discuss how they want their watershed to look. This desired end state must meet or surpass existing requirements for water quality, flow or other conditions. They can develop a plan that describes their *vision* (outcomes), the *actions* they need to take to achieve that vision, and what *indicators* they will use to measure their success. As previously discussed, the *Framework for Water Management Planning* currently provides the foundation and broad guidance for the development of *Water Management Plans*. In the section below, we build upon that framework and address any outstanding issues not addressed by the original document. To begin with, the principles of a *watershed* management planning process are provided below:

- Citizens, communities, industry and government must share responsibility for watershed management in Alberta and work together to improve conditions within their local watershed. Therefore, a watershed management plan must be developed by a partnership based on a shared understanding of water resources and environmental, social and economic demands and limits.
- Watershed management plans should adopt a watershed approach that identifies the natural and cultural resources within the watershed and shows how the landscape and hydrological systems interact and function within the watershed. This approach further recognizes that all human activity, either through direct use of Alberta's water or indirectly through various land-use activities, can affect the quality and quantity of Alberta's water resources and aquatic ecosystems. Thus, a watershed management plan is a key tool to integrate land-uses that have an impact on water, and its objectives in turn can be included in other regional and local land-use and natural-resource planning initiatives such as forest management plans, municipal development plans, species at risk recovery plans, etc.

- Watershed management plans should use outcome-based planning and adaptive management as organizing principles. Watershed management plans are informed by a State of the Watershed Report that identifies the current status of important watershed components and emerging challenges within the watershed. Outcomes should lead to actions, actions should have measurable results, and results should lead to improved watershed management. It should not be constrained by information gaps. Where warranted, action can be taken before a plan is finalized.
- The process is adaptive and flexible to address emerging challenges and new information.
- Watershed management plans must respect all transboundary water agreements with neighboring jurisdictions and must not adversely affect sub- or larger watersheds.
- Watershed management plan endorsement is based on consensus among all applicable sectors that use, affect or regulate the water resource or sectors who are affected by water use and related impacts. All participating sectors (government, environmental non-government organizations, industry, and other governments, etc.) are accountable to deliver and report on progress toward achieving outcomes identified in an endorsed plan.

2.4.1 Scope of a Watershed Management Plan

A watershed management plan sets shared outcomes, key actions, and monitoring and reporting requirements to achieve the goals of the *Water for Life* strategy for a defined watershed. The scope of a watershed management plan typically includes the following:

- It adopts a source-to-use watershed management approach that recognizes all human activity, either through direct use of Alberta's water or indirectly through various land-use activities, that can have an impact on the quality and quantity of Alberta's water resources; that is, one user's wastewater is another user's source water.
- It must address the needs of aquatic ecosystems.
- It includes the entire watershed from the main river to tributaries, lakes, wetlands, groundwater and land use as it impacts aquatic ecosystems.
- Its focus is to address factors that affect water quality, quantity and the maintenance and protection of healthy aquatic ecosystems.

The *Framework for Water Management Planning* explains that the geographic scope of planning is usually the watershed. It can encompass the entire watershed – moving beyond the main river to include tributaries, lakes, wetlands and groundwater and the connectivity between them. Within this broad scope, there is considerable flexibility in how planning for the watershed is approached. In some cases, stakeholders may agree to prepare a distinct plan for

a sub-watershed featuring a certain tributary, lake or region within the main watershed. There may be specific features or issues that warrant special attention. At some point, however, the group should establish outcomes and objectives for the entire watershed. The *Framework for Water Management Planning* also states that planning "can address a broad range of issues at a variety of magnitude or may involve just a single issue." In general, a plan should address the issues impacting the watershed including water use and land use as they affect water quality, quantity and aquatic ecosystem health.

Recommendation 7: Watershed management plans should be developed within the overall context of the whole watershed and broaden the focus from the main river to the entire watershed (tributaries, lakes, wetlands, groundwater, sub-watersheds) including water use and land use as they affect water.

2.4.2 Components of a Watershed Management Plan

Key to determining the scope of a plan is an examination of the relevance of the issue(s) to watershed management. Linking the issue to the intended management action can also help determine, at the scoping stage, what type of plan needs to be developed and towards whom the plan and its actions will be directed. Some specific planning issues can be directly addressed through the provisions of the existing *Framework for Water Management Planning*. For example:

- If the issue is confined to water quantity for a specific waterbody, a recommendation for a Water Conservation Objective to the Director of Alberta Environment may be all that is required. (See section 3.3 of the *Framework for Water Management Planning* for more information.)
- If the issue requires guidance on how water should be managed in a particular area or if it involves other factors that should be considered by Alberta Environment when issuing permits and licences or making other decisions under the *Water Act*, then a Water Management Plan would fulfill this need. (See section 3.1 of the *Framework for Water Management Planning* for more information.)
- If the issue requires a recommendation to enable water allocation license transfers and holdbacks, an *approved* Water Management Plan is required. (See section 3.2 of the *Framework for Water Management Planning* for more information.)

Where broader guidance for multiple issues involving water quantity, quality and aquatic health for a watershed is needed and this guidance recommends actions to many management authorities, then a Water Management Plan developed through a watershed planning approach would be required. Such a plan would be referred to as a *watershed management plan* as described in this report. The term *watershed* itself is not defined in the *Water Act* (under legislation). This does not preclude WPACs and WSGs from calling their plan a *watershed management plan*, as this term is recognized in the *Water for Life* strategy. However, it is important that if such a plan includes a recommendation on a Water Conservation Objective, license transfers or holdbacks, that at a minimum, that portion of the *watershed management plan* should be identified and named in a manner consistent with the terminology of the *Framework for Water Management Planning*. In this way, a Water Management Plan and Water Conservation Objectives can be incorporated into a *watershed management plan*.

While in the past, watershed management plans and Water Management Plans were largely directed to water managers, there is nothing in the *Water Act* or the *Framework for Water Management Planning* that precludes WPACs and WSGs from making recommendations on land use or other activities as they impact the water resource. Indeed, this is central to a *watershed planning approach*. There is also nothing precluding this advice being directed to other local, provincial or federal government decision-makers, as well as other land and resource managers.

An additional watershed connection is found in section 5 of the *Framework for Water Management Planning*, titled *Strategy for the Protection of the Aquatic Environment*. This strategy, authorized under the *Water Act*, clearly states that objectives for protecting the aquatic environment should be included in water management and other planning exercises. The aquatic environment is defined as having four elements: water quality, quantity, aquatic species, and habitat, which includes the physical and biological structure of the waterbody and the land surrounding it.

Therefore, regardless of what it is called, a *watershed* or *water management plan* will direct advice to the appropriate authority to inform their decision-making. Thus, it is very important that the plan be clear on what the issue is, what management actions are required to resolve the issue, and who has the authority to take such actions (that is, to whom the advice will be directed).

2.4.3 Steps for Preparing a Watershed Management Plan

The preparation of a watershed management plan may appear to be a daunting task, but the combined commitment and effort of key stakeholders will make it an achievable and worthwhile process. Approaching it in smaller steps will make it easier for participants to recognize the progress being made. As previously mentioned, many tools are available online to describe the steps in creating a plan. It is also valuable for WPACs and WSGs to share their planning experiences and learnings at annual meetings and through other communication tools.

In general, there are five main steps involved in preparing a watershed management plan:

1. Assemble the right people to prepare the plan. As reflected in *Strengthening Partnerships*, the planning team must include representatives from the full range of affected stakeholders and decision-making authorities. Special committees may be needed to address certain planning tasks or related projects. Although governance structures vary, in many instances this committee would report to the WPAC or WSG board of directors at key milestones. As well, the Chair of the board may be a *de facto* member of the committee.
2. Review the State of the Watershed Report and other background reports. The watershed management plan should be based on the best available information. This requires planning team members to be familiar with available information. In some instances, the State of the Watershed Report may have identified data gaps that need to be filled prior to the initiation of a watershed management plan.

3. Prepare and seek approval for the Terms of Reference* for the watershed management plan. The Terms of Reference is usually the first key milestone requiring consensus approval by the planning committee and the WPAC or WSG board of directors.

Based on the State of the Watershed Report and input from stakeholders and the public, the Terms of Reference for a watershed management plan should, at minimum, include:

- A description of the planning area
 - An overview of current conditions and an initial description of issues
 - The intended scope and objectives of the planning process
 - The roles, responsibilities and accountability of those who will be involved
 - The identification of and potential linkages with, other land, water and resource plans, strategies and relevant legislation
 - The proposed public consultation process
 - A work plan
 - Information requirements
 - A proposed schedule for the planning process
4. Prepare a draft plan. There may be several iterations of drafting and reviewing by the team. Drafts may also be revised after review by technical committees, the board, or after a public consultation event has provided input on a draft.
 5. Seek plan approval by the board of directors.* There are many layers of approval that need to be sought throughout a planning process. The Terms of Reference is usually the first key milestone requiring consensus approval by the planning committee that represents the relevant sectors and the WPAC or WSG board of directors. Once drafting begins, technical and other sub-committees must approve relevant sections. The planning committee itself must endorse the final version it submits to its board of directors. (This process is discussed further in section 2.4.5, below.) After board endorsement, the plan should be released for public review.

* Note that if the water or watershed management plan includes Water Conservation Objectives, or water licence transfers, then formal government approval is required for the Terms of Reference and final plan.



2.4.4 Content of a watershed management plan

Collaborative watershed management planning requires involving partners in the expression, at minimum, of outcomes, actions and performance measures. Defining appropriate outcomes is perhaps the most challenging aspect of planning. Watershed outcome statements outline what people want to see maintained or developed as a desired end state. Such statements tend to take into account ecological, economic, social and cultural values and may change over time. As outcome statements become more detailed, they may shift from being value-based (qualitative) to more knowledge and science-based (quantitative). Outcomes at various scales may need to be nested or fit within a hierarchy. For example, *healthy aquatic ecosystems* are a provincial scale *Water for Life* outcome. On a regional scale, this outcome might be further defined in relation to a specific area, such as *our lake is a healthy aquatic ecosystem for fish*. It could also become very specific, such as *dissolved oxygen levels will not fall below X mg/L*.

In general, outcomes must be S.M.A.R.T.: specific, measurable, achievable, realistic and timely. In support of watershed management planning outcomes must also:

- Match or exceed regulatory requirements
- Contribute to the realization of *Water for Life* goals
- Be meaningful to stakeholders and the public

Outcomes must also lead to specific management actions. Watershed management plans should define the current and future issues that stand in the way of achieving the desired outcomes. Recommended actions to address these issues should be based on, but not limited by, available credible science and information. As mentioned above, outcomes must also be measurable. Performance measures are discussed further in section 2.6 of this report.

Because the outcomes, issues and actions will be different in different watersheds, it is difficult to be definitive on what must be included in a plan. Below is a list of key sections and topics that *may* be considered. This list is not exhaustive and items are not mandatory. They are meant to provide broad guidance only.

Potential Structure and Examples of Topics for a Watershed Management Plan

Introduction

- General introduction to watershed management and water planning; that is, why do a plan here?
- Federal, provincial and local legislation and policy relevant to the area and any transboundary commitments.
- Existing water, land, resource, wildlife, settlement or other planning already applicable to the area.

Description of the Processes Used to Prepare the Plan

- Identify the appropriate sectors and their representative who will be participants in preparing the plan, their roles, responsibilities and authorities.
- Explain when and how input may be gathered from communities of interest and the public.
- Explain when and how formal consultation will occur.

General Description of the Watershed*

- Biophysical characteristics including geography, climate, ecoregions, land cover (wetlands, forests, vegetation, etc.) and key wildlife resources.
- Jurisdictional boundaries. For example, municipal areas, protected areas, and crown or private lands.
- Human settlement, including densities and predicted growth.
- Current and future predicted land-use type and intensity. For example, timber harvesting, agriculture, and recreation.

*This section may be a short summary if this information is already provided in a State of the Watershed Report

Specific Description of the Water Resource

- Watershed and sub-watershed delineation.
- Hydrology including surface and sub-surface sources, drainage patterns, contributing/non-contributing areas, and recharge/discharge areas.
- Infrastructure including for storage, flow control, drinking and waste water treatment.
- Overview of current and predicted trends in water quality and quantity.
- Overview of aquatic ecosystems including fish and other biodiversity, wetlands, and riparian areas, etc.
- Overview of current chemical, physical and biological water monitoring information.
- Overview of the in-stream flow needs.



Issues and Challenges

- Issues identified from the State of the Watershed Report or other background reports.
- Issues arising from data gaps, public input and consultation processes.
- Water supply versus water use, including amount and type, and predicted future demands.
- Loading from point and non-point sources of water pollution including discharges and run-off.
- Additional pressures on the aquatic ecosystem, such as recreational fishing and shoreline development.
- Flood-plain risk.
- Future predicted pressures on quantity, quality and aquatic ecosystem health. For example, growth and development, climate change, etc.

Outcomes, Actions and Performance Measures to Address These Issues

- Commitment to the *Water for Life* outcomes as defined on a regional basis.
- Regional specific outcomes for the entire watershed and its terrestrial and aquatic components; a Water Conservation Objective; enabling of a water licence transfer system and holdbacks; matters and factors to be considered by a government Director in making allocations; water quality outcomes and objectives; wetland protection, conservation and restoration objectives; riparian protection (setbacks), conservation and restoration objectives; biodiversity protection, conservation and restoration objectives; etc.
- To achieve outcomes, identify what needs to be done (actions), by whom (responsibility), and by when.
- Identify performance measures so that progress toward each outcome can be measured.

Review and Renewal Process

- Timelines for reporting progress and plan review.
- Conditions that would trigger an unscheduled review.

Sources, Citations, References, and Other Appendices

- The approved Terms of Reference for the watershed management plan should be included as an appendix.

2.4.5 Getting Endorsement of a Watershed Management Plan

Once a planning committee has produced its next-to-final draft of a watershed management plan, they must have a process for sign-off. That is, members must have a way to indicate they agree to the plan's recommendations and actions, and can endorse it and eventually implement the actions assigned to them in the plan. Note that key stakeholders should be engaged throughout the process. The next-to-final draft should not be their first exposure to the plan.

The challenge is for each member to be able to sign on behalf of the constituency he or she represents. For example, a typical watershed planning area may have numerous municipalities within it, yet a WPAC or WSG may have only one or two seats on its board or planning committee for local governments. Thus, local governments need a communications structure whereby they can collectively provide their input, and in turn, determine their ratification when the plan is complete. Although every planning body will determine its own process, a possible scenario might look like this:

- A plan steering committee says they are done and are satisfied with the content of the draft plan. They ask the board to approve moving to the endorsement stage.
- The board approves moving to endorsement and each steering committee member takes the document back to their sector constituency for ratification.
- Upon reviewing the plan, if a sector cannot ratify it, they should submit their reason and an alternative suggestion back to the planning committee for its consideration. This process may result in another iteration of the draft.
- Once a sector has ratified the plan, they may have their own formal process for recording this approval such as recorded minutes or a resolution. At the WPAC planning committee table, the member is able to endorse the plan with his signature on behalf of his or her sector.

Different sectors may have different processes for seeking ratification of watershed management plans. Most industry sectors have umbrella organizations, such as the Canadian Association of Petroleum Producers, or the Alberta Forest Products Association, and will not find this process new to them. Local governments also have umbrella organizations, such as through the Alberta Urban Municipalities Association, Alberta Association of Municipal Districts and Counties, and the Metis Settlements General Council. However, most umbrella organizations cannot officially endorse a plan on behalf of their members, nor would they take



a position recommending that individual members support the plan. Formal endorsement of the plan would only come from individual affected members through their own approval processes. Nevertheless, these umbrella organizations provide valuable assistance in communicating information about the plan to their affected members.

Other sectors may need to form new communication structures in order to be effective participants in a planning initiative. For example, the Government of Alberta is forming Cross-Ministry WPAC Support Teams so that multiple ministries can provide input and endorse plans through their representative on the WPAC or WSG planning committee.

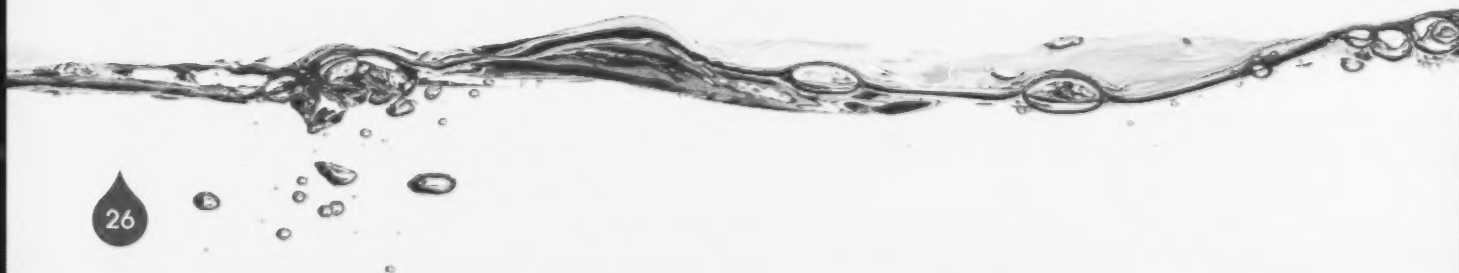
If consensus cannot ultimately be achieved on a given issue, it may be referred to the Government of Alberta or another appropriate decision-making authority, if one exists, with sufficient background so that they can deliver a decision. That decision would then become part of the watershed management plan and progress toward that outcome would be reported just as progress is reported on consensus outcomes.

Once the planning committee has reached consensus and each member has endorsed the plan, the document may go forward to the WPAC or WSG board of directors for final approval and approval of release as a public document.

2.5 Do: Implementing a Watershed Management Plan

Once a plan has been ratified by all affected sectors and officially endorsed and released by the WPAC or WSG board of directors, then implementation can begin in full. (Where agreed to, some actions may have already been initiated.) Assigned actions will be carried away by each sector for implementation. Where actions belong to multiple sectors, new working groups might be created and assigned various tasks. The Alberta Government will be a key endorsing partner, assuring that the decision-making tools of all Ministries (such as licensing, permitting, approvals, codes of practice, etc.) are supportive of the plan's outcomes.

The WPAC or WSG will continue to play a strong role in facilitating and tracking implementation actions. It also is important that the contributing sectors report to the WPAC or WSG on actions taken and progress made towards achieving the plan's outcomes. This information should be publicly available.



2.6 Check: Monitoring and Reporting

To ensure that actions are leading to the achievement of outcomes, performance measures should be developed, monitored and included in annual reporting. Indicators tend to be physical measurements of environmental variables and are, therefore, useful in determining performance measures. However, not all performance measures need to be physical. There may also be value in tracking social and economic measures, such as knowledge, attitudes and behaviours. The *State of the Watershed Reporting Handbook* identifies the following characteristics of good indicators:

- Reflect watershed health
- Objective and comparable
- Sensitive to stressors
- Interpretable and understandable
- Relevant to societal concerns
- Measure progress
- Cost-effective to monitor

While there are several universal watershed health indicators that are well supported by science, the most meaningful watershed health indicators will reflect local and regional ecological realities and therefore are watershed-specific, arising out of the deliberations of the partnership. To that end, watershed management plans provide regional and local solutions to regional and local issues. For example, a healthy, stable trout population may be a desired outcome for a certain river within a watershed. A review of current conditions may indicate that harmful amounts of sediment are washing into the river due, in part, to livestock grazing in areas bordering the river. Under the Alberta Riparian Habitat Management Program, also known as the Cows and Fish Program, the rancher can receive information and support to modify cattle grazing practices to better protect the riparian habitat along the river. By monitoring certain indicators, such as the condition of the riparian habitat, sediment levels in the water and the number and condition of trout in the river, the success of this approach can be evaluated.



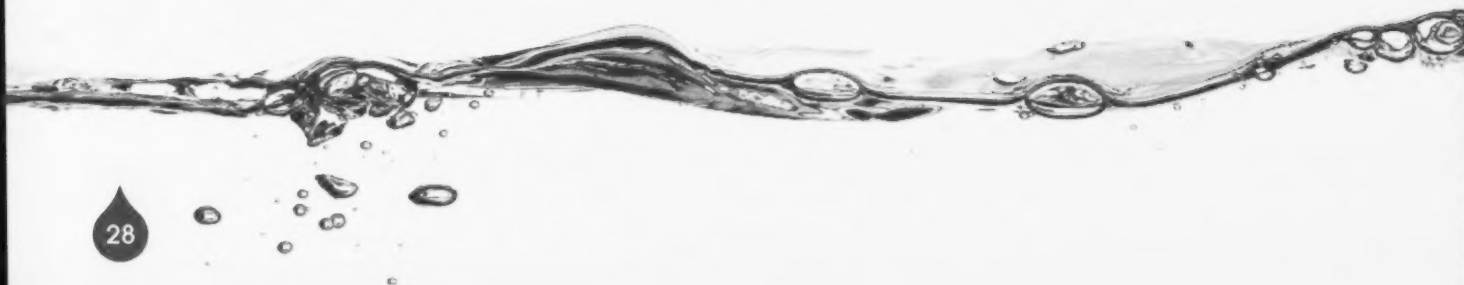
Taken together, performance measures should convey an understanding of whether or not endorsed outcomes have been achieved. While performance measures may be initially identified in the State of the Watershed Report, or the watershed management plan, they may be adjusted over time to better suit the measurement of outcomes. As performance measures are reviewed, and as data is collected and evaluated, actions to support outcomes may also be subject to change.

A great deal more about performance measures can be found online. As previously mentioned, the *State of the Watershed Reporting Handbook* deals with this topic in more detail. Also, please see *Indicators for Assessing Environmental Performance of Watersheds in Southern Alberta* available online at <http://environment.gov.ab.ca/info/library/7945.pdf>.

2.7 React: Re-evaluate the Plan

The adaptive watershed management process is designed to be iterative. Watershed and sub-watershed management plans should be considered living documents. There should be a regular review of the plans as performance measures provide feedback, new information comes to light, and new issues arise. Often, this periodic review is incorporated into successive State of the Watershed Reports that provide a snapshot of current conditions and how these conditions have or have not changed since a watershed management plan was implemented.

Reviews should determine if plans are still relevant, if outcomes are being achieved, or if changes to the outcomes, actions, or performance measures are required. Planning bodies should identify an automatic review period. Because plans may take 3-5 years to complete, a 10-year period for review might be appropriate. They may also want to list the conditions or events that would trigger an unscheduled review.



3.0 Other Issues for Watershed Management

3.1 The Authority of a Watershed Management Plan

The *Water Act* and subsequent *Framework for Water Management Planning* recognize the need for planning on a watershed basis to inform regulatory decision-making. A Water Conservation Objective, Water Management Plan, or approved Water Management Plan, is advisory only and has no authority beyond compelling decision-makers to consider it in their decision-making. Similarly, a watershed management plan is advisory only. The Government of Alberta, however, having been committed to *Water for Life* by cabinet policy, is compelled to consider this planning tool in its decision-making.

Although it lacks its own authority, a watershed management plan has considerable weight and influence. Ensuring that the appropriate decision-makers and authorities are a part of the planning process from the beginning brings the authority to implement plan actions to the process. This collective authority of the members of the planning body should not be underestimated.

Because none of the partners have relinquished any authority over their own affairs to any other partner, the governing board of every partner must indicate its endorsement of the plan. Any participant who endorses a watershed management plan is also agreeing to its obligation to fulfill its commitment to achieve the outcomes in the plan. That is, endorsing a watershed management plan makes partners accountable to one another to deliver the plan. They must also share their knowledge and expertise, as appropriate, in the service of performance measurement and subsequent reporting. *Water for Life* partnerships should publicly report on progress toward achieving the outcomes in a watershed management plan and general watershed health. Annual reporting on performance will help to enforce shared obligations.

Although a watershed management plan itself has no legal authority, the advice it provides may be utilized in decision-making processes by those with the appropriate authority. Endorsement of a plan should be reflected in government regulatory instruments (such as approvals, licensing, permitting, codes of practices, etc.) in support of attaining plan outcomes. For example, once endorsed, that portion of a plan relevant to an Alberta Environment Director may be considered in the application of the *Water Act*. For actions requiring Cabinet approval, like enabling water transfers and holdbacks, relevant plan components may be forwarded to Cabinet for approval.



Similarly, those portions of the plan that direct advice to municipal governments may be approved by a Municipal Council and incorporated into local bylaws, setbacks, environmental reserves or other planning and legislated tools and processes. Some portions of a watershed management plan may not be achievable through legislated authority. For example, best management practices on private agriculture lands and water conservation practices may require a voluntary stewardship approach.

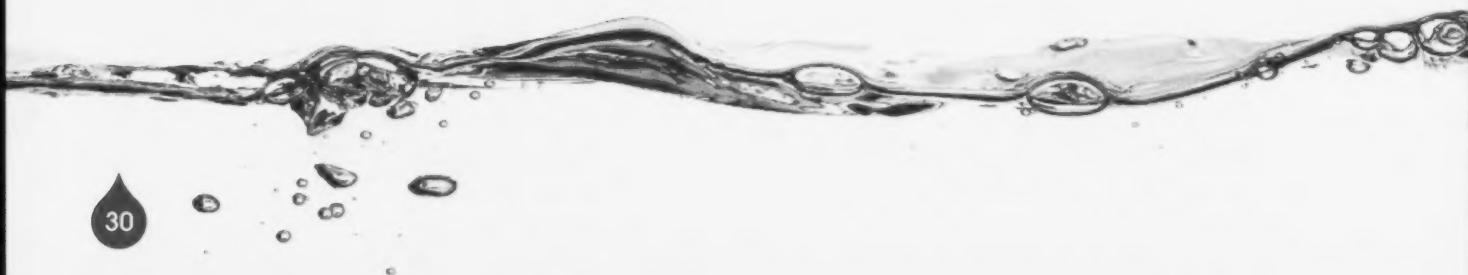
Further experience will demonstrate whether stakeholders can fully engage in watershed management under the existing policy, legislative and regulatory framework. It may be found that legislative changes are needed to compel sectors with the required decision-making authority to participate in watershed management planning and to compel the implementation of agreed-upon actions in an endorsed plan. Thus, it is recommended that plan implementation be carefully monitored.

Recommendation 8: The Alberta Water Council should review the implementation of Alberta's watershed management plans as part of the *Water for Life* Implementation Review process and re-visit the question of needed legislation in the future.

3.2 The Relationship of a Watershed Management Plan to Other Planning Initiatives

Section 9 of the *Water Act* states that the "Director or other person developing a water management plan may adopt an integrated approach to planning with respect to water, land and other resources...." Hence watershed management planning is a key tool to support the integration of other land and resource management plans. Integration is largely achieved by working together through shared governance to define and achieve desired outcomes. With their experience and expertise in this approach, WPACs and WSGs are well placed to ensure outcomes from watershed management plans are also considered in other regional land, resource and biodiversity planning.

The Government of Alberta is committed to provide leadership and direction toward better integration across all forms of resource and environmental policy and planning and is developing new initiatives to achieve it. Regional planning initiatives under the *Land Use Framework*, the *Cumulative Effects Management Framework*, the *Water Management Framework for the Industrial Heartland and Capital Region*, and the *East-Central Alberta Cumulative Effects Prototype* are all efforts at various scales to improve Alberta's approach to integrated, adaptive sustainable resource and environmental management. These initiatives fit with *Water for Life* and improve our ability to achieve *Water for Life* outcomes.



WPACs and WSGs have access to a wealth of knowledge and expertise about their watersheds and should be consulted by other planning processes. They offer a significant resource to the Regional Advisory Committees established under the *Land Use Framework*. Nevertheless, the Government of Alberta is ultimately responsible to coordinate the integration of watershed management plans with any other land and resource management plans, associated licences, approvals or operating agreements within the provincial sphere.

Recommendation 9: Regional Advisory Committees established under the *Land Use Framework* should seek input from Watershed Planning and Advisory Councils and Watershed Stewardship Groups about their watershed management information, objectives, and expertise. Where water or watershed management plans exist, these plans must be considered by the Regional Advisory Committees in their regional planning process.

However, many jurisdictions, not just the provincial government, are responsible to coordinate the integration of resource and land management plans. For example, both rural and urban municipal governments play a large role in determining local land use and how it will affect local water resources. Thus, it is critical that they bring their authority to the watershed planning table. In turn, a watershed management plan can also assist and inform municipal planning exercises. The two are linked by the *Municipal Government Act* as follows:

- The purpose of a municipality includes developing and maintaining safe and viable communities (section 3).
- Municipalities are required to carry out land use planning pursuant to section 17 of the Act. The purpose of planning includes maintaining and improving the quality of the physical environment within which patterns of human settlement are located (section 617).
- Every statutory plan, land use bylaw and planning action undertaken must be consistent with the *Land Use Policies* (section 622).
- The *Land Use Policies* (established under Order in Council 522/96) include goal 6.3, "to contribute to the protection and sustainable utilization of Alberta's water." Policy 2 of section 6.3 states that municipalities are encouraged to determine appropriate land use patterns in the vicinity of the [water] resources having regards to impacts on an entire watershed as well as local impacts.

Similarly on crown lands, operational planning by industry can be informed by a watershed management plan which may, for example, recommend a riparian setback to prevent sedimentation that would be harmful to resident fish. Additionally, industry can be directed by a plan through the regulatory system, where a Public Lands or other Approvals Director attaches terms and conditions to a water allocation or discharge licence to meet the recommendations of a watershed management plan.



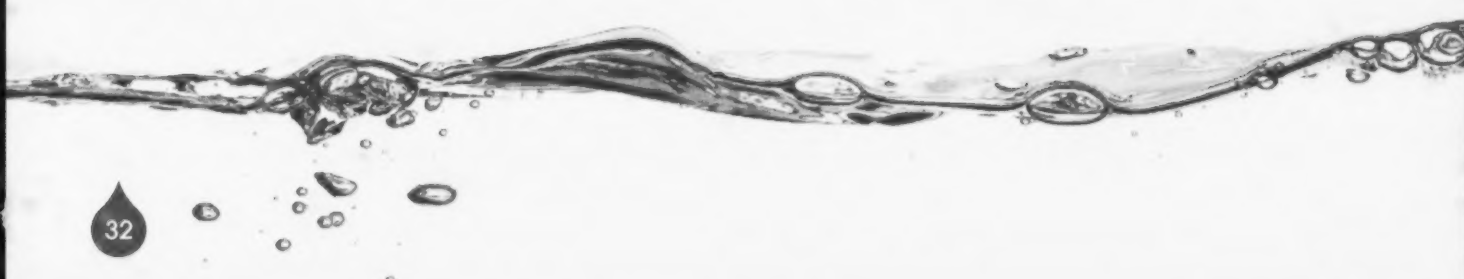
3.3 Resource Needs to Support Watershed Management

Watershed management that incorporates an adaptive management approach requires a long-term commitment of resources to ensure success. Financial, technical and other human resource requirements need to be defined at the outset, along with the specific responsibilities of each party. Successful development and implementation of a watershed management plan depends on the financial and in-kind support received from participating partners. Most planning exercises are faced with limited capacity. Long-term capacity is needed:

- To develop, implement, and measure the effectiveness of watershed management plans and State of the Watershed Reports across the province,
- To ensure effective engagement and collaboration by all participating sectors and ensure communication support is provided to sector networks, and
- To collect, interpret and analyze data, some of which may be available from government, industry partners or other sources.

More stability in the nature of funding for WPACs and WSGs is essential for success. Much of the funding for basic operations has been provided to date by the Alberta Government through various grants and contracts. However, based on the *shared* governance approach and the *shared* responsibility of many authorities and agencies, funding for WPACs and WSGs undertaking watershed planning should be drawn from a much wider range of sources. Clear guidance about the financial support for these initiatives will improve efficiency for everyone.

The Alberta Water Council's 2008 report, *Water for Life: Recommendations for Renewal*, identified resourcing partnerships and other contributors to the strategy as needing further attention. Long term, sustainable resources are required to successfully develop, implement and renew watershed management plans. *Water for Life* partners should be involved in the development of an equitable formula for financial and in-kind support, while the Government of Alberta should provide basic support for partnership operations.



Recommendation 10: The Government of Alberta, working with its *Water for Life* partnerships, should facilitate the development of a *Water for Life* Partnership Funding Model that elicits support from all relevant sectors, understanding that core operating funding will continue to be provided by the Government of Alberta.

Expertise and access to knowledge varies widely among partnerships. At present, information transfer is cumbersome and evaluated data is difficult to obtain. The Government of Alberta must take a lead role to build informed *Water for Life* partnerships. This involves enhanced water data collection, storage, evaluation and public reporting on Alberta's water resources by all partners and partnerships. Having a central reference point for water-related information would be very beneficial to all stakeholders involved in watershed planning.

Recommendation 11: The Government of Alberta should pursue the development of an information network to support watershed management.



4.0 Conclusion

A number of key recommendations are made throughout this document. These recommendations, based on a watershed and shared governance approach, enhance the *Framework for Water Management Planning*. Combined, the recommendations and the existing framework provide a sound foundation for watershed management planning in Alberta. However, to avoid confusion, these two documents should be combined.

Recommendation 12: In light of the recommendations within this document, the Government of Alberta should review the *Framework for Water Management Planning* and update it by March 31, 2009 to better reflect a watershed and shared governance approach.

Since the *Water for Life* strategy was first released in 2003, watershed management has grown in Alberta and will continue to evolve as we learn from our experiences. Thus, Alberta's *Framework for Water Management Planning* should be revised to include a watershed and shared governance approach and should be considered a living framework that should be reviewed periodically to incorporate improvements and new information as required.

Appendix A — Glossary

Accountability

Accountability is the acknowledgement and assumption of responsibility for actions, products, decisions and policies including administration, governance and implementation within the scope of a given role or position.

Adaptive Management

The ability to provide for policy learning and adjustment of management actions on the basis of experience. Adaptive management ensures that a policy, plan or initiative need not be perfect before it can be implemented and that participants can adapt the policy, plan or initiative as required over time to meet agreed-upon outcomes.

Aquatic Ecosystem

An aquatic area where living and non-living elements of the environment interact. This includes the physical, chemical and biological characteristics of rivers, lakes and wetlands and the plants and animals associated with them.

Authority

A person or organization having power or control in a particular, especially political or administrative, sphere.

Consensus Decision-Making

A decision-making process that not only seeks the agreement of participants but also to resolve or mitigate the objections of the minority to achieve the most agreeable decision. A healthy consensus decision-making process usually encourages and addresses dissent early, maximizing the chance of accommodating the views of all partners.

Endorsement

Endorsement is the act of partners within a partnership formally expressing their assent, publicly and definitively, to proceed with a policy, plan or initiative under *Water for Life*.

Indicator

State of the watershed reporting often identifies indicators as metrics to assess watershed health. Indicators tend to be physical measurements of environmental variables and are, therefore, useful in helping to determine performance measures. Not all performance measures need be physical; there may also be value in tracking knowledge, attitudes and behaviours, for example.

Issue

Concerns related to the quantity or quality of water within a watershed as it relates to the health of the aquatic ecosystem or human use of the water, such as nutrient enrichment arising from agricultural run-off.

Major River Basin

Alberta's major river basins listed under the *Water Act* include the Hay, Peace/Slave, Athabasca, Brazer, North Saskatchewan, South Saskatchewan, and Milk river basins.



Outcome-Based Approach

Outcome statements outline what people want to see maintained or developed as a desired end state. Such end states tend to take into account ecological, economic, social and cultural values and may change over time. As outcomes statements become more detailed, they may shift from value-based (qualitative) to more knowledge and science-based (quantitative). Outcomes at various scales may need to be nested or fit within a hierarchy. For example, *healthy aquatic ecosystems* are a provincial-scale *Water for Life* outcome. On a regional scale, this outcome might be further defined in relation to a specific area, such as *our lake is a healthy aquatic ecosystem for fish*. It might also become very specific, such as *dissolved oxygen levels will not fall below X mg/L*. In general, outcomes must be S.M.A.R.T.: specific, measurable, achievable, realistic and timely.

Partner

An individual or organization that shares the costs, risks, benefits, power or resources necessary to achieve a common objective.

Partnership

A voluntary organization of provincial, watershed, community or individual stakeholders who agree to undertake common or complementary activities, enter into agreements and work together for the orderly, efficient and accountable achievement of results. These partnerships can make recommendations to improve watershed management to bodies with legislative authority.

Placed-Based Approach

This approach asserts that the people in the place are the best ones to identify and find solutions to the issues. For water, the geographically-defined place is the watershed. A watershed is an area of land that catches precipitation and drains it to a common point such as a wetland, lake, river, stream or groundwater aquifer.

A place-based approach means looking holistically at the place, including both its physical features and the issues affecting them. Physical features of a watershed may include large main stem rivers, as well as smaller tributaries, streams, creeks, lakes, wetlands, sub-watersheds, groundwater and the linkages between them (connectivity). Issues can include point and non-point source pollution, source water protection, storm water and wastewater management, subsurface water supplies and a variety of land use activities that impact the water resource.

Policy

A governing set of principles given force and effect by elected officials in order to meet recognized public needs. Policy is made in the name of the public and is interpreted and implemented by both public and private actors. The authority to set policy is what distinguishes government from the private sector and it is fundamental to the work of government. In general, policies are broad, conceptual documents that outline the approach or considerations to be taken into account by decision-makers. Policy is used to cause, facilitate or promote desired outcomes and prevent adverse events. Policy can also refer to a consistent course of action that may be based on constitutional authority, legislation, regulation, budgets, procedures or habits. In the latter case, the consistent course of action is unwritten but is still policy.

Regulatory Backstop

A regulatory backstop is a legal instrument that establishes authority to make a decision and to enforce that decision. It can serve as a support to voluntary actions. For example, a watershed management plan might recommend a maximum volume of wastewater discharged to a river. The affected municipal and industrial plants may work together to achieve that goal. Should there be a lack of cooperation or willingness to support that objective, the Government of Alberta could make it a legal requirement as a licence condition for each facility under the *Water Act*. The licence condition would constitute a regulatory backstop.

Responsibility

Responsibility is a duty, obligation or liability that an entity (whether it is a government, corporation, organization or individual) is expected to carry forward to a successful conclusion. With responsibility goes the authority to direct and action necessary to ensure success.

Riparian Areas

Any land that adjoins or directly influences a waterbody – including floodplains, areas that would be affected by a 1-in-100 year flood, and land that affects alluvial aquifers. These areas support plants and animals; protect aquatic ecosystems by filtering out sediments, contaminants and excess nutrients from upland areas; and build and maintain banks and shorelines. They are part of the extensive drainage and natural storage network within every watershed.

Role

The part played or assumed by a person in society, life, etc., influenced by his or her conception of what is appropriate.

Shared Governance

Shared governance refers to a governance structure where both government and other stakeholders share responsibility for development and delivery of policy, planning, and programs or services, but where government retains legislative accountability. Shared governance is a collaborative goal-setting and problem-solving process built on trust and communication. Shared governance requires a clear accountability framework with clear roles, responsibilities and relationships.

Stakeholder

A stakeholder is an individual, organization or government with an interest in resource and environmental management in Alberta or who is otherwise affected by resource management decisions.

Sub-Watershed

A sub-watershed is simply a watershed that is part of a larger watershed. For example, the Pembina River is a tributary of the Athabasca River. The land base that drains into the Pembina River can be described as a sub-watershed of the larger Athabasca River watershed.

Waterbody

Any location where water flows or is present, whether or not the flow of the presence of water is continuous, intermittent or occurs only during a flood. This includes, but is not limited to, wetlands and aquifers.



Water Conservation Objective

Under the *Water Act*, the amount and quality of water set by a Director to protect a natural waterbody or its aquatic environment; tourism, recreational, water use for transportation or waste assimilation; or fish or wildlife management efforts.

Watershed

An area of land that catches precipitation and drains it to a common point such as a marsh, lake, stream or river and recharges groundwater. A watershed can be made up of several sub-watersheds that contribute to the overall drainage of the watershed.

Watershed Management Plan

A comprehensive document that provides assessment and management information for a geographically defined watershed, including the analysis, actions, participants and resources related to the development and implementation of the plan.

Watershed Management Planning Process

The watershed management planning process is a comprehensive approach to the management of water and watershed resources within an inclusive shared governance framework. It includes ensuring that the appropriate stakeholders are engaged in developing and implementing a watershed management plan based on the goals of *Water for Life*, the plan's more or less constant renewal through adaptive management processes, and ongoing commitments by all partners to take action to achieve consensus-based management outcomes and improve watershed health.

The creation and endorsement of a watershed management plan is one act; implementing, evaluating and revising that plan is another that converts paper into process. Reporting progress to stakeholders and the public is essential to ensure that a plan informs a process that is ongoing and focused on future generations.

Wetland

Land having water at, near, or above the surface or which is saturated with water long enough to promote wetland or aquatic processes as indicated by poorly drained (hydric) soils, hydrophytic vegetation, and various kinds of biological activity adapted to the wet environment. Degraded wetlands may not show all of these characteristics but remain important.

Appendix B — Project Team Methodology

From July through September 2007, the Shared Governance and Watershed Planning Framework Project Team interviewed 25 – 30 key players in watershed management planning from across Alberta to identify issues for further exploration as it developed the shared governance model and watershed management planning framework.

This input was used to develop a *Discussion Guide* that asked 21 specific questions related to watershed management planning and how best to involve the many stakeholders with an interest in water resources in shared governance and watershed management planning. A *Companion to the Discussion Guide* provided additional background information.

The Project Team then hosted four by-invitation, full-day facilitated stakeholder workshops across Alberta in November 2007.

- Edmonton, Tuesday, November 20.
- Slave Lake, Thursday, November 22.
- Lethbridge, Monday, November 26.
- Calgary, Tuesday, November 27.

Participants were identified by Project Team members from each of the sector groups represented at the Alberta Water Council, with additional participation from Watershed Stewardship Groups, regional health authorities and First Nations.

Workshop participants received the *Discussion Guide* and *Companion to the Discussion Guide* in advance and were encouraged to work their way through the 21 questions included in the *Discussion Guide* in preparation for the workshops. Workshop participants received a plenary introduction to the session, and then facilitators worked

through each of the 21 questions with breakout groups of between eight and thirteen members, depending on overall attendance at each workshop. Participant comments were recorded but not attributed. Finally, workshop participants were encouraged to provide written submissions if they wished to emphasize particular points or address issues that had been somehow neglected in the workshops. All input was summarized in the Project Team's report titled, *What We Heard: Summary Findings of the Shared Governance-Watershed Management Planning Workshops*, which is available online at http://www.awchome.ca/Portals/0/pdfs/SharedGov_WWH_Report.pdf.

The Project Team used the consultation report and background information to inform its debate about key issues to be resolved as it developed the shared governance model and watershed management planning framework recommendations. Consultants to the Project Team also undertook an extensive literature review and provided an annotated bibliography to the Project Team. In April 2008 the Project Team hosted a full-day workshop with the Alberta Water Council to ensure that its evolving recommendations were consistent with the expectations of the Council. As well, individual Project Team members and support staff made presentations to several stakeholder groups during the weeks prior to submission of the Project Team's report to the Alberta Water Council in December 2008.

All of this input – the initial exploratory interviews, stakeholder workshops, Alberta Water Council workshop, feedback at stakeholder meetings, and the international literature review – contributed to the Project Team's deliberations in pursuit of the shared governance model and watershed management planning framework.

Appendix C — Project Team Members

Thanks are extended to the following members of the Shared Governance and Watershed Planning Framework Project Team:

Name	Organization	Sector
Bob Cameron, <i>Co-Chair</i>	South Peace Environmental Association	Environmental
Phyllis Kobasiuk, <i>Co-Chair</i>	Alberta Association of Municipal Districts & Counties	Rural
Cam Lane	Alberta Sustainable Resource Development (later, Alberta Environment)	Alberta Environment & Alberta Sustainable Resource Development
David Lloyd	Alberta Chamber of Resources	Mining
Lori Jeffery-Heaney	Alberta Urban Municipalities Association	Small Urban
Dan Moore	Alberta Forest Products Association	Forestry
Tom Olson	Fisheries and Oceans Canada	Federal Government
Shirley Pickering	Highwood Water Management Plan Public Advisory Committee	Watershed Stewardship Groups
Ron Renwick	St. Mary River Irrigation District	Irrigation
Tracy Scott	North Saskatchewan Watershed Alliance	Watershed Planning & Advisory Councils
Bill Symonds	Alberta Municipal Affairs	Municipal Affairs

Note: Tim LeClair, with the Métis Settlements General Council also participated in the initial work of the Project Team.

Thanks also go to Tim Toth, Brian Free, and Petra Rowell, all with Alberta Environment, for providing secretariat support. As well, Michael Evans of Torque Communications wrote the initial drafts of the Team's reports and facilitated stakeholder workshops.

Appendix D — Terms of Reference

Terms of Reference- Shared Governance & Watershed Planning Framework Project Team

Adopted by Council on January 30, 2007.

Background / Context:

Starting Definition of Shared Governance (to be finalized by the Project Team):

Shared governance refers to a governance structure where both government and external parties share responsibility for development and delivery of policy, planning, and programs or services, but where government retains accountability. Shared governance is a collaborative goal setting and problem-solving process built on trust and communication. Shared governance requires a clear accountability framework with clear roles, responsibilities and relationships.

During the development of *Water for Life: Alberta's Strategy for Sustainability*, Albertans stated that they wanted to be involved in watershed management decisions. The Government of Alberta agreed with this desire and provided clear direction in *Water for Life* that watershed management is a shared responsibility with all Albertans to be carried out in partnerships with Albertans.

To enable involvement of Albertans at the provincial, regional and local level three types of partnerships were created, the Alberta Water Council, Watershed Planning and Advisory Councils and Watershed Stewardship Groups. Each of these partnerships involves a cross-section of sector groups developing and working towards common watershed management outcomes.

Many questions have arisen regarding the relationship of these partnerships to each other, their relationships to existing decision-making authorities (including all orders of government) and the relationship of watershed planning to other resource and development planning. To address these questions, the Alberta Water Council identified in their 2006-07 Operational Plan the need to develop a shared governance framework and a watershed management planning framework. Early on in these two tasks the Alberta Water Council recognized their strong connection and directed that a single Project Team manage them.

These Terms of Reference describe how these two tasks will be managed so that the shared governance framework and the watershed management planning framework are fully integrated as one project, managed by one team.



Guiding Principles:

The Shared Governance Project Team will adopt the guiding principles of the Alberta Water Council. The Alberta Water Council, individually and collectively, is guided in its activities by a desire to be: collaborative, fair, innovative, respectful, timely, transparent, and trustworthy.

Meetings and Meeting Management

Members will exercise good meeting etiquette: good listening, open, honest communications, and members will 'be there' for each other. Members are expected to attend meetings regularly and provide relevant, timely and accurate information for the team's consideration. Sound meeting management will be followed; the Secretariat will record minutes and distribute them in a timely manner.

Working within the Sector

The Project Team will ensure those who need to be included are at the table. Team members should consult with their sectors to ensure the Team discusses issues relevant to the sector. The discussions and decisions of the Team should be relayed in a timely manner back to the sectors to ensure accountability and transparency.

Issue Identification and Resolution

Members will ensure relevant issues are brought to the table for discussion, and that issues are resolved by consensus. Successful consensus decision-making often leads to more innovative solutions, but it requires a high level of trust and collaboration. Failure to reach consensus on an issue will be referred to the AWC for discussion, with a summary of the issue and differing views.

Participants in Council activities are also expected to be familiar with Council's media policy, which includes a protocol for responding to media requests.

Team Goals/Results/Expectations:**Outputs**

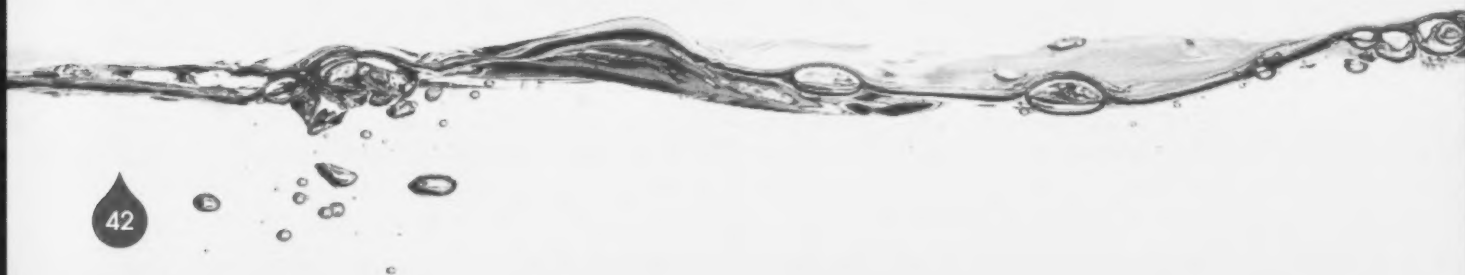
There are two outputs:

1. Shared Governance Framework. A document that describes the roles, responsibilities, accountabilities and relationships involved in shared governance and the process by which shared governance can be established and maintained.
2. Watershed Management Planning Framework. A guideline document that describes the contents of and how to develop watershed management plans, who is involved, the relationships to other planning, approval and implementation of plans, and the integration with shared governance.

Outcomes

There are two outcomes:

1. Ownership and Commitment to Shared Governance by All Sectors. The description and process for achieving shared governance is embraced by all shareholders. The creation of the document is only a small portion of the desired outcome. The desired outcome of this task is that all sectors buy in to and work within the shared governance framework.
2. Ownership and Commitment to the Watershed Management Planning Framework. The essential elements and processes identified in the framework document are found to be necessary and sufficient for successful development and implementation of watershed management plans. Again, the creation of the document is only a small portion of the desired outcome. For watershed management planning to be successful, all sectors must participate in the development of plans as described in the framework and all sectors must follow through with implementation of agreed-to actions in a timely manner.



Key Actions/Deliverables:

Scope

The following statements describe the scope of the shared governance and the watershed management planning framework projects.

1. The project will define what it means to be a partner in shared governance and what authority, responsibility and accountability comes with being a partner. In a consensus based decision-making process a method for indicating agreement and commitment to action may be required.
2. The project will define the relationship of the *Water for Life* partnerships, the Alberta Water Council, Watershed Planning and Advisory Councils and Watershed Stewardship Groups, to each other.
3. The project will define who has authority, who has responsibility, who has accountability for watershed management, and the interrelationship of these three roles. The starting point will be to understand the authority, responsibility and accountability in the current governance model.
4. The project will define how to harmonize the goals and actions of shareholders that impact management and development in a watershed. The integration of watershed management planning with other mandated air, land, and natural resource management planning is required.
5. Given the current development of the *Land Use Framework*, an explicit and timely connection must be made between the *Land Use Framework* and the frameworks for shared governance and watershed management planning.
6. The project will address the balance between the expectations for various groups to be fully involved all the time, and the capacity for those groups to be involved. There may be a variety of ways to engage groups. The project will outline potential options.
7. The project will be guided, but not constrained, by current legislation. New legislation or legislative amendments may be required to facilitate the implementation of shared governance and watershed management planning.
8. The project will provide guidance for appropriate timing of approval and implementation of plans and recommendations coming from the partnerships. Clarification of the authority of a watershed management plan (as mandatory vs. advisory) and its relationship to other plans should be explored. Success and credibility of a governance model requires recommendations developed in plans to be implemented in a timely manner.
9. The project will define the process and provide guidance on re-engaging parties who choose not to participate. The project will develop a process to resolve differences when they arise and a dispute resolution mechanism. Success and credibility of shared governance requires all shareholders to participate in the process.
10. The project will create a new framework for watershed management planning that expands the current water management framework to incorporate all elements of watershed management, and embodies shared governance.



11. Success and credibility of watershed management planning requires appropriate and sustained funding. The project will define funding responsibility and an order of magnitude of the funding requirement.
12. The scope defined for these projects is meant to be enabling, not constraining. As the Project Team proceeds, it may encounter issues of scope that were not thought of by the Working Group in preparation of this terms of reference.
13. The project will stay connected with other Alberta Water Council projects and other Government of Alberta policy and strategy initiatives. This connection will ensure appropriate linkages are developed between initiatives.

Communication and Consultation

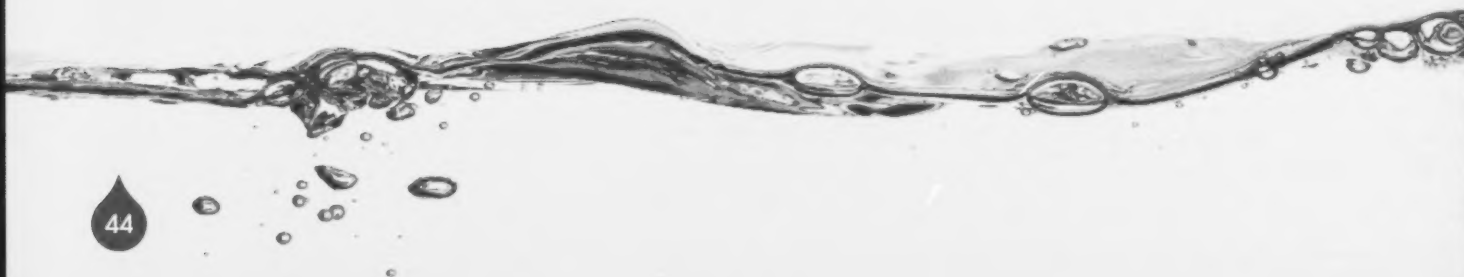
Three stages are recommended to develop the shared governance and watershed management planning documents.

1. Gain Initial Understanding and Ideas. The Project Team must hold informal discussions with a cross section of potentially affected groups to obtain ideas and an understanding of shared governance and watershed management planning. This would logically focus on the AWC, WPACs and WSGs, as they are structured to include a cross section of groups. Any important groups that may not be included in the WPACs and WSGs should be contacted directly. The purpose of the contact is to gather initial thoughts and ideas and to let these groups know that the project is underway. This is not extensive consultation but rather contact with a sample of representative groups. It is anticipated that 15 to 20 contacts will be made at this early stage. Professional facilitation may be needed.

2. Develop Essential Elements. The Project Team will develop the essential elements of the shared governance and watershed management planning framework documents. These essential elements will include the main messages that the documents will contain. These essential elements will be tested with the AWC and with interested sector groups, which could include WPACs, WSGs, their component groups, or interested groups not represented on WPACs and WSGs. A list of interested sector groups should be prepared during the initial stage and added to as appropriate. This will involve more groups than the representative sample of groups used in the first stage. It is anticipated that 25 to 35 contacts will be made during this stage. Professional facilitation may be needed.
3. Prepare Draft Documents. The Project Team will prepare draft documents after receiving comments on the essential elements. The draft documents will be tested with the interested sector groups. Consultation consultants may be involved. It is expected that this consultation will involve several dozens of sector groups. It is anticipated that 60 to 80 contacts will be made during this stage. Professional facilitation may be needed.

Note: The Project Team will determine a more inclusive method of final consultation. This consultation will likely include WPACs, WSGs, municipalities, industries and environmental groups, to achieve acceptance of the project. General public consultation is not necessary for this project that is designed to outline frameworks for shared governance and watershed management planning. The public should be involved on projects that address environmental issues or develop watershed management plans that use these two frameworks.

Note: It is recommended that direct consultation and communication support be provided to this project. It is assumed that government staff could undertake the first two stages if capacity is available. However, it is recommended that a consultant handle the final stage.



Knowledge Required

To be successful in fulfilling the stated outputs, the following knowledge requirements are needed:

1. A shared understanding and acceptance of what shared governance means and how it should be practiced in the context of the Alberta Water Council, Watershed Planning and Advisory Councils, and Watershed Stewardship Groups.
2. What are the current planning systems and governance models for water, land, and natural resources in Alberta? The Project Team may also consider reviewing current watershed management planning and governance systems in other jurisdictions that are recognized as successful models of relevance to Alberta.
3. What are the current barriers and opportunities in the development and implementation of watershed management plans? Watershed Planning and Advisory Councils should be surveyed for the opportunities and barriers that currently exist and could be addressed through the Framework for Watershed Management Planning.



Schedule of Key Actions/Deliverables:

The two key outputs of the Shared Governance Project Team are (1) The Shared Governance Framework and (2) the Watershed Management Planning Framework. Following approval of this Terms of Reference in early 2007 and the formation of the Project Team, the Project Team will report on and review the key deliverables with the AWC according to the

schedule below. This staged approach will ensure that proper review, feedback and approval are obtained from the AWC prior to commencement of successive stages of the project, and that AWC leadership and engagement is maintained throughout the project.

Deliverable	Proposed Timeline	Responsibility
Finalize TOR	December 2006	SG Working Group
Approve TOR	January 2007	AWC
Form Shared Governance Project Team	February 2007	AWC
Develop Detailed Work Plan, Consultation Plan & Budget	February 2007	Project Team
Initial Consultation (Gain Initial Understanding and Ideas)	March/April 2007	Project Team & Consultation Support
Develop Essential Elements	May 2007	Project Team
– Review Themes with AWC	June 2007	Project Team
– Review Themes with Sector Groups	June/July 2007	Project Team & Consultation Support
Prepare Draft Documents	July/August 2007	Project Team
– Consult on Draft Documents	Sept./Oct. 2007	Project Team & Consultant
Obtain Final Approval of Draft Documents by AWC	November 2007	Project Team
Prepare Final Documents	December 2007	Project Team
Adoption and Implementation of process outlined in documents	2008	Project Team, AWC, All Partners

Budget:

Gather New Information	\$ 20,000
• Literature review, initial contact of participants	
• AENV + 2 - 3 members	
Communication and Consultation	\$ 80,000
Gain Initial Understanding and Ideas (15 - 20 contacts)	\$ 20,000
• Workshop in each location (perhaps 6 communities) + lunch + travel	
• 2 - 3 Project Team members	
• AENV facilitation	
Develop Elements (25 - 35 contacts)	\$ 20,000
• Member travel expenses (20 member trips @ \$1000/each)	
Prepare Draft Documents (60 - 80 contacts)	\$ 40,000
• Workshop in each location + individual meetings	
• Contracted facilitation	
Document Compilation and Printing	\$ 20,000
• \$10,000 (each document) X 2 documents	
TOTAL estimate	\$ 120,000

Project Team Structure/Membership:

Although the project has two distinct components, it could be managed as one project by one team having two subcommittees that keep in regular communication. This has advantages and disadvantages. The Project Team will make the final decision about team management structure.

Membership

Members of the Project Team will represent the broad cross section of interests on the Alberta Water Council. Members are expected to be in contact with their sector throughout the project to bring forward sector knowledge.

It is recommended the Project Team be drawn from the following sectors (listed by category):

- Industry (3 sector representatives)
 - Forestry, Agriculture, Oil and Gas
- Non-Government Organizations (3 sector representatives)
 - Environmental, Watershed Planning and Advisory Councils, Watershed Stewardship Groups
- Government (4 sector representatives)
 - First Nations-Métis Settlements (combined); Rural; Large-Small Urban; Federal
- Government of Alberta and Provincial Authorities (2 sector representatives)
 - Municipal Affairs, Sustainable Resource Development

It is believed that this project will demand a significant amount of time of its members. Project Team members should anticipate a commitment of about one year, comprised of one meeting per month (one day duration, plus 1/2 day (average) preparation), and work assignment equivalent of up to 10 working days. This totals 28 person-days for the year.

Role of the Co-Chairs

The Project Team's Chairperson should be an Alberta Water Council member and will ensure reporting back to the Alberta Water Council as required. Project Team members will select the team's Chairperson or two Co-Chairs, as appropriate. Roles include:

- Chair meetings
- Include member agenda items
- Ensure the AWC's expectations of the team is clear
- Ensure the team has adequate support and necessary information to efficiently and effectively carry out its Terms of Reference
- Inform the team of other programs and initiatives to avoid duplicating work being addressed elsewhere
- Serve as liaison to the AWC and Government of Alberta

Role of Project Team Members

Members are expected to attend meetings regularly and provide relevant, timely and accurate information for the team's consideration. Team members should consult with their sectors and others within their Category, to ensure issues are identified for discussion by the Team, and to ensure decisions made by the Team are relayed back to sectors.

Members missing more than three consecutive meetings without reasonable cause will be asked to be replaced through consultation with the respective agency/sector they represent.

Role of the Secretariat

Under the guidance of the Chair, the Secretariat will prepare agendas, coordinate meetings, record discussions and develop progress and final reports that reflect the team's direction.

In co-operation with the Secretariat, a secretary will record meeting discussions and prepare a summary of meeting outcomes to the team, including action items. Minutes will be prepared in a succinct and unbiased manner.

Significant Parameters or Constraints:

The following could be barriers to successful project completion:

- The Project Team must build awareness and understanding of shared governance with project shareholders, to have meaningful and effective collaboration with them.
- The degree of collaboration with shareholders will influence their commitment to and ownership of the process, and of project outcomes.
- The development and implementation of a collaboratively produced shared governance framework and a framework for watershed management planning is significant to the success of the *Water for Life* strategy.
- While timelines are ambitious, there is urgency to completing the project; lack of clarity in roles and responsibilities represents a risk to watershed planning.

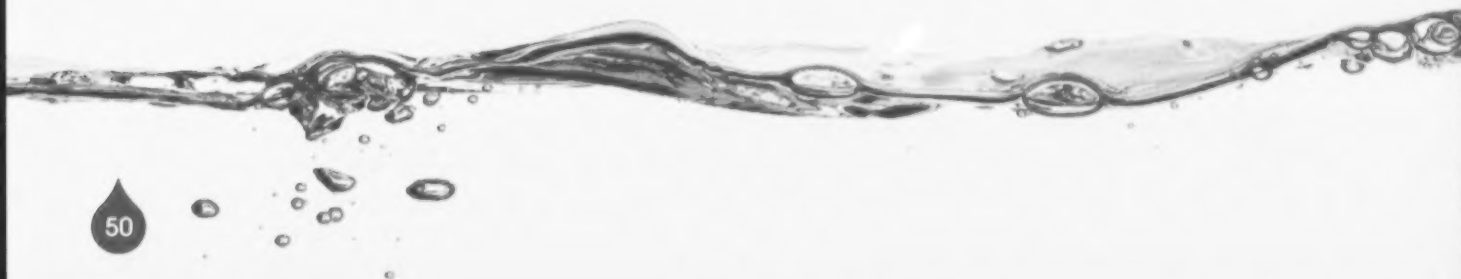
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